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Victory on demand, time and time again

Victory® Pacemaker Family

ST. JUDE MEDICAL

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Pocket Sales Guide

For SJM Personnel Only

Ordering No. **N0738** Printed in USA 12051.5

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Introduction

This guide is intended to be used as a quick reference tool that you can easily access. The information is intended to help you answer common questions and address objections. Please refer to the product and competitive overview document on my.sjm.com for more comprehensive information

Key Messages and Benefits

The Victory® pacemaker's ability to measure thresholds and intrinsic events out-of-clinic enables the physician to save clinic time. This in combination with all of the features from the fully-equipped Identity® ADx pacemaker, as well as the unbeatened longevity of St. Jude Medical pacemakers, will enable St. Jude Medical to define a new "state-of-the-art" for pacemakers.

- **Less Unnecessary Ventricular Pacing:** St. Jude Medical demonstrated in the DAVID (Dual-Chamber And VVI Implantable Defibrillator) study that excessive ventricular pacing may contribute to heart failure in some patients. The Ventricular Intrinsic Preference (VIP™) algorithm adds enhanced flexibility to years of clinical experience with AutoIntrinsic Conduction Search technology to encourage the patient's intrinsic ventricular conduction to prevail.

- **Less Time at Follow-Up:** Upon interrogation, the Victory® device displays the last measured sense and capture threshold (ventricular only) results obtained automatically within the last 24 hours. The results are displayed with follow-up SEGMs for quick visual validation of the test results. If the clinician chooses to perform additional tests during an in-clinic visit, we have added preset test values to facilitate prompt testing. The addition of this time-saving feature allows for more quality time with patients and less time maneuvering through the programmer screens. The FastPath® Summary Screen allows the clinician flexibility with multiple follow-up options.

- **More Time Over the Life of the Device:** Features that potentially could extend longevity are Ventricular Intrinsic Preference, Advanced Hysteresis, Auto Rest Rate and the Ventricular AutoCapture™ algorithm. They may also reduce cost and patient stress by reducing pacemaker replacements.

Victory® Pacemaker Overview

The Victory® DR pacemaker incorporates the most advanced bradycardia management tools on the market into one small package that includes the following new features:

- Ventricular Intrinsic Preference (VIP™) technology, a new, refined AICS algorithm designed to reduce unnecessary ventricular pacing
- Device-dictated intrinsic measurements (both P and R waves) and diagnostic trends
- Lead Monitoring and Auto Polarity Switch
- Ventricular Rate during AMS Histogram
- Separate programmable Max AF Suppression Rate
- Ventricular AutoCapture™ pacing system enhancements
- Pre-set test values to speed in-clinic testing
- Optimized shipped setting to speed implant set-up
- Follow-up EGMs for intrinsic monitoring and ventricular AutoCapture™ pacing system

Victory® DR vs. Insignia® Ultra DR vs. EnPulse® DR Pacemaker

Feature or Therapy	Victory® DR 5816 XL DR 5810 DR	Insignia® Ultra 1291 1290	EnPulse® E2DR01 E2DR21
Ventricular Intrinsic Preference (VIP™) technology	✓	AV Search Hysteresis	Search AV+
Auto P- and R-Wave Measurements/Trend	✓	✓	✓
Diagnostics and Follow-up			
Lead Monitor and Trends	✓	✓	✓
Follow-Up EGM	✓		
V. Response during AMS Histogram	✓	✓	✓

Victory® DR vs. EnRhythm® DR vs. EnPulse® DR Pacemaker

Feature or Therapy	Victory® DR 5816 XL DR 5810 DR	EnRhythm® DR P1501DR	EnPulse® E2DR01 E2DR21
Ventricular Intrinsic Preference (VIP™) technology	✓	Managed Ventricular Pacing (MVP)	Search AV+
Auto P- and R-Wave Measurements/Trend	✓	✓	✓
Diagnostics and Follow-up			
Lead Monitor and Trends	✓		✓
Follow-Up EGM	✓		
V. Response during AMS Histogram	✓	✓	✓

Victory® DR vs. Philos® II DR vs. Symphony® DR Pacemaker

Feature or Therapy	Victory® DR 5816 XL DR 5810 DR	Philos® II DR 341 826	Symphony® DR 2550
Ventricular Intrinsic Preference (VIP™) technology	✓	AV Hysteresis	DDD/AMC Mode
Auto P- and R-Wave Measurements/Trend	✓	✓	✓
Diagnostics and Follow-up			
Lead Monitor and Trends	✓	✓	
Follow-Up EGM	✓		
V. Response during AMS Histogram	✓	✓	✓

Competitive Overview

Medtronic

EnRhythm® Pacemaker, Model P1501DR

Medtronic's position: New devices offer MVP™ pacing mode to automatically minimize unnecessary right-ventricular pacing. In addition to minimizing right-ventricular pacing, the new EnRhythm® pacemaker has reactive anti-tachycardia pacing, which continually searches for new opportunities to restore a patient's normal sinus rhythm during long atrial tachycardia episodes. It also offers enhanced diagnostic features, especially for patients who may have additional rhythm problems in the upper chambers of the heart, as well as improved longevity.

EnRhythm® Pacemaker Key Features

Tachyarrhythmia Therapy Algorithms
- Antitachycardia pacing (ATP) therapy
- Reactive ATP

Tachyarrhythmia Prevention Algorithms
- Atrial Preference Pacing
- Atrial Rate Stabilization
- Post Mode Switch Overdrive Pacing

Miscellaneous Key Algorithms
- Auto-Adjusting Sensitivity
- MVP™ (Managed Ventricular Pacing)
- Ventricular Rate Stabilization

Diagnostics
- Cardiac Compass trends
- Episode data and EGM storage >16 minutes

EnRhythm® Pacemaker Opportunities and Weaknesses

- Bipolar lead **required.**

- Pre-arrhythmia SEGMs **impact longevity** by approximately 33% or by four months per year (based on device modeling with 50% atrial pacing and 5% ventricular pacing). Note: The Pre-Arrhythmia EGM feature does not apply to AT/AF Episodes. The device stores up to five seconds of EGM prior to AT/AF detection, regardless of the pre-arrhythmia settings.

- ATP isn't clinically proven. Several studies, including the Medtronic AT500™ Device Verification study[1] (325 patients, $p < 0.89$; ATTEST[2], 370 patients, $p < 0.25$ and ASPECT[3], 288 patients) **demonstrated no significant difference** in the mean number or frequency of AT episodes or AT burden when comparing ATP in the On group versus the Off group.

- The ATTEST study[2] demonstrated an increase in AF Burden!

- 71% of the patients had **an increase in recurrent AT after the use of PMOP[4]!**

- The MVP™ algorithm allows two out of four beats to be non-supported in the ventricle prior to switching back to DDD. Results of the MVP™ pilot study show your current AICS algorithm is very competitive:

  96.1% of AP-VS intervals recorded were < 350 ms (within AICS range)[5]
  90% of ventricular rates < 90 bpm (within AICS range)[5]

  Symptomatic patients, missed ventricular beats, mitral valve regurge and retrograde conduction my not be the therapy your physicians are looking for.

  Keep in mind the studies demonstrated > 40% RV pacing increases risk!
  In patients with intact sinus conduction, right ventricular (RV) pacing > 40% leads to an increase in death and heart failure hospitalization[6]. In patients with sinus node dysfunction, right ventricular (RV) pacing <40% resulted in measurably less risk of HF hospitalization[7].

  If your patient is symptomatic with the MVP™ feature, you have no other option!

Size and Shape

Pacemakers	Victory® DR 5810	Victory® XL DR 5816	EnRhythm® P1501DR
Dimensions (mm)	43 (h) x 44 (l) x 6 (t)	44 x 52 x 6	45 x 51 x 8
Mass (gm)	18 gm	23.5 g	21 gm
Volume (cc)	8 cc	11 cc	13 cc
Longevity* (years)	6.2 years	11.0 years	10.5 years

*2.5 V (A & V), 500 Ω, 60 ppm, 100% DDD pacing (internal comparison)

Medtronic

EnPulse® Pacemaker, Model E2DR01

Medtronic's position: The world's first fully automatic pacemaker designed to optimize therapy and simplify care. As the first-ever completely automatic pacemaker, the EnPulse® device offers exclusive features that make it sophisticated yet simple to use. It performs a wide range of diagnostic tests on a regular basis, without clinician intervention. This allows more time to focus on the patient, less time on the device.

EnPulse® Pacemaker Key Features
Tachyarrhythmia Prevention Algorithms
- Post-Mode Switch Overdrive Pacing
- Non-Competitive Atrial Pacing

Miscellaneous Key Algorithms
- Lead Monitor
- Automatic Polarity Confirmation
- Atrial Capture Management
- Ventricular Capture Management
- Sensing Assurance
- Search AV+
- Ventricular Response Pacing

Diagnostics
- Search AV+ Histograms
- Atrial Arrhythmia Trend
- Ventricular Rate Histogram during Atrial Arrhythmias
- Atrial Arrhythmia Durations
- Lead Impedance
- Sensitivity Trend

EnPulse® Pacemaker Opportunities and Weaknesses

- A bipolar lead required.
- EGM onset decreases longevity by one day for every week that it is active.
- The dual-zone rate response may be difficult to program correctly.
- Dual-chamber SEGM collection is not available; have to select either A or V.

- Kappa had an evoked response undersensing issue which resulted in high-output mode, therefore Ventricular Capture Management has been modified in the EnPulse® device. Time will tell if the algorithm modification works and if the clinicians/physicians will give it a try.
- Auto-sensing algorithms have proven superior to fixed-sensing algorithms: FALSE.

"The comparison between fixed and variable sensitivity **did not reveal any superiority** over automatic adaptation." [8]

"Compared with the recommended 2:1 sensing safety margin, the Auto Sensing feature **performed equal to manual programming** in preventing episodes of under/oversensing, and was better for atrial undersensing during sleep." [9]

Size and Shape

Pacemakers	Victory® DR 5810	Victory® XL DR 5816	EnPulse® E2DR01
Dimensions (mm)	43 (h) x 44 (l) x 6 (t)	44 x 52 x 6	44.7 x 47.9 x 7.5
Mass (gm)	18 gm	23.5 g	27.1 gm
Volume (cc)	8 cc	11 cc	12.1 cc
Longevity* (years)	6.2 years	11.0 years	7.5 years

*2.5 V (A & V), 500 Ω, 60 ppm, 100% DDD pacing (internal comparison)

Medtronic

Medtronic AT500™ Pacemaker
Model AT501

Medtronic's position: The world's first pacing system to offer unparalleled capabilities to monitor, treat and help physicians effectively manage atrial arrhythmias.

Medtronic AT501™ Pacemaker Key Features
Tachyarrhythmia Prevention Algorithms
- Atrial Preference Pacing
- Atrial Rate Stabilization
- Post Mode Switch Overdrive Pacing
- Atrial Pace-Termination Therapy
- Non-Competitive Atrial Pacing

Miscellaneous Key Algorithms
- Auto-Adjusting Sensitivity Thresholds

Diagnostics
- AT/AF Episode List
- Cardiac Compass Trends
- Quick Look Report
- VT Episode List
- Duration Histogram Report

Medtronic AT501™ Opportunities and Weaknesses

- The device has very **limited bradycardia features:** no capture management, rate drop response or sleep rate.
- It is a very large device with poor longevity.
- ATP isn't clinically proven. Several studies (AT500 Verification study[1], 325 patients, $p < 0.89$; ATTEST[2], 370 patients, $p < 0.25$ and ASPECT[3], 288 patients) **demonstrated no significant difference** in the mean number or frequency of AT episodes or AT burden when comparing ATP in the On group versus the Off group.
- Atrial prevention algorithms may be pro-arrhythmic:
  –The ATTEST study[2] **demonstrated an increase in AF Burden**!
  –71% of the patients had **an increase in recurrent AT after the use of PMOP[4]!**
- FDA labeling **requires septal lead placement** for the use of the atrial prevention algorithms.
- It is indicated for atrial **tachyarrhythmias only.**

Size and Shape

Pacemakers	Victory® DR 5810	Victory® XL DR 5816	Medtronic AT501™
Dimensions (mm)	43 (h) x 44 (l) x 6 (t)	44 x 52 x 6	44 x 59 x 7.5
Mass (gm)	18 gm	23.5 g	26 gm
Volume (cc)	8 cc	11 cc	14.1 cc
Longevity* (years)	6.2 years	11.0 years	5.8** years

*2.5 V (A & V), 500 Ω, 60 ppm, 100% DDD pacing (internal comparison)
** 3 V

Guidant

Insignia® Ultra Pacemaker, Model 1290

Guidant's position: Guidant's best MV blended-sensor pacemaker just got better.

Insignia® Ultra Pacemaker Key Features
Tachyarrhythmia Prevention Algorithms
- No atrial arrhythmia prevention algorithm available

Miscellaneous Key Algorithms
- Automatic Capture
- Auto Sense Algorithm
- Rate Smoothing
- Ventricular Rate Regulation

Diagnostics
- Quick Check
- Arrhythmia Logbook
- Activity Log
- Daily Measurement Data

Insignia® Ultra Pacemaker Opportunities and Weaknesses

- There is **very limited clinical experience** with the Ventricular Automatic Capture algorithm.
- Blended sensors are touted as clinically superior, but they can be complicated and time consuming to set up.

  "Both accelerometer and minute ventilation sensors significantly improve patient activity and symptoms when used separately; their additional combination and optimization through **blending do not provide any additional benefit."**[10]

  "We found **no significant differences among the three most utilized sensors in clinical endpoints.** Those patients who received blended sensors had worse physical function quality of life scores. However, clinical selection of the most sophisticated sensor for the most ill patients cannot be excluded as an explanation of these results."[11]
- There is no atrial prevention algorithm.
- AV Search Hysteresis is **limited to 300 ms**.

Size and Shape

Pacemakers	Victory® DR 5810	Insignia® Ultra 1290	Victory® XL DR 5816	Insignia® Ultra 1291
Dimensions (mm)	43 (h) x 44 (l) x 6 (t)	44 x 42 x 8	44 x 52 x 6	49 x 43 x 8
Mass (gm)	18 gm	25.4 g	23.5 g	29.6 g
Volume (cc)	8 cc	10.8 cc	11 cc	12.6 cc
Longevity* (years)	6.2 years	6.0 years	11.0 years	8.5 years

*2.5 V (A & V), 500 Ω, 60 ppm, 100% DDD pacing (internal comparison)

Biotronik

Philos® II DR Pacemaker, Model 341 826

Biotronik's position: Philos® II: Offering a better view.

Philos® II Pacemaker Key Features

Tachyarrhythmia Prevention Algorithms
- Preventative Overpacing

Miscellaneous Key Algorithms
- Active Capture Control
- Rate Fading

Diagnostics
- AF Classification
- VES Classification
- Impedance Trend
- AV Rate Trend

Philos® II Pacemaker Opportunities and Weaknesses

- Active Capture Control **only periodically adjusts** the primary pulse amplitude.
- It is approximately **10% heavier, with much less longevity.**
- It is not a strong competitor because the devices and features are **unfamiliar/unknown.**
- The atrial prevention algorithm **isn't clinically proven to be effective.**

Size and Shape

Pacemakers	Victory® DR 5810	Victory® XL DR 5816	Philos® II DR 341 826
Dimensions (mm)	43 (h) x 44 (l) x 6 (t)	44 x 52 x 6	42 x 51 x 8
Mass (gm)	18 gm	23.5 g	26.0 g
Volume (cc)	8 cc	11 cc	10 cc
Longevity* (years)	6.2 years	11.0 years	5.5 years**

*2.5 V (A & V), 500 Ω, 60 ppm, 100% DDD pacing (internal comparison)
**3.6 V

ELA

Symphony® DR Pacemaker, Model 2550

Philos® II Pacemaker Key Features
- Miscellaneous Key Algorithms
- Symphony® DR Pacemaker, Model 2550

Diagnostics
- CLIP
- Ventricular Threshold Follow-Up
- Autosensing Histograms
- AIDA+

Symphony® Pacemaker Opportunities and Weaknesses

- Dual-sensor can be **complicated and time consuming to set up**.
- It is not a strong competitor because the devices and features are **unfamiliar/unknown.**

Size and Shape

Pacemakers	Victory® DR 5810	Victory® XL DR 5816	Symphony® 2550
Dimensions (mm)	43 (h) x 44 (l) x 6 (t)	44 x 52 x 6	53.1 x 36.2 x 6.4
Mass (gm)	18 gm	23.5 g	24 gm
Volume (cc)	8 cc	11 cc	10.4 cc
Longevity* (years)	6.2 years	11.0 years	11.5 years**

*2.5 V (A & V), 500 Ω, 60 ppm, 100% DDD pacing (internal comparison)
**0.35 ms

Competitive Key Selling Points

Medtronic

Selling Against the EnRhythm™ Pacemaker

1. What about MVP technology? Is this the therapy that your physicians are looking for? Are you willing to intermittently not support the ventricle?
   - MVP creates short-long-short intervals, (Maximum pause between V events is 2x lower rate + 80 ms).
   - MVP risks remaining in AAIR during first degree AV block.
   - MVP has a MTR limitation.
   - MVP is not "easier-to-use." All DDDR parameters are still necessary.
   - MVP is not a "simple" algorithm. Complex criterion to switch between DDDR and AAIR and vice versa. Even in AAIR there needs to be ventricular sensing with ventricular blanking periods.

- If patients are symptomatic with MVP there is no other option.
- Results of the MVP pilot study show:
  - 96.1% of AP-VS intervals recorded were < 350 ms (within AICS range).[12]
  - 90% of Ventricular rates <90 bpm (within AICS range).[12]

2. **Capture management algorithm:** It is not available in either chamber.

3. **Longevity impact:** Pre-arrhythmia SEGM impact longevity by approximately 33% or by four months per year (based on device modeling with 50% atrial pacing and 5% ventricular pacing). Note: The pre-arrhythmia EGM feature does not apply to AT/AF Episodes. The device stores up to five seconds of EGM prior to AT/AF detection, regardless of the pre-arrhythmia settings.

4. **Size matters:** The EnRhythm™ device may weigh less but is 25% thicker and 15% larger than our XL device.

5. **New algorithms:** It appears that Medtronic just bundled already existing algorithms in a different package.

6. **Clinical effectiveness of atrial arrhythmia prevention algorithms questionable:** In the Medtronic AT500™ pacemaker verification study (325 patients, $p < 0.89$) and the ATTEST trial (370 patients, $p < 0.25$) showed no significant difference in AT frequency and burden when compared to the On group versus the Off group. ADOPT-A trial showed AF Suppression to be clinically significant in decreasing AF and AT burden (399 patients, $p < 0.05$) 25% and 65% respectively.[13, 14]

7. **Insignificant ATP algorithms:** The Medtronic AT500™ pacemaker verification study (325 patients, $p < 0.89$) and the ATTEST trial (370 patients, $p < 0.25$) showed no significant difference in the mean number of AT episodes or AT burden when comparing ATP in the On group versus the Off group. In another clinical trial called the ASPECT (288 patients), investigators found similar results with no clinical significant.[15, 16]

8. **Why pay for ATP if it doesn't help clinically?**
   - ATP doesn't work on AF
   - ATP doesn't reduce the re-initiation of AF

9. A dedicated bipolar device offers no option if a lead is damaged on the outer coil.

Selling Against the EnPulse® Pacemaker

1. **No dual-SEGMs:** The user has to select atrial or ventricular SEGM; dual chamber SEGMs are still unavailable.

2. **Modifications to capture management algorithm:** The Ventricular Capture Management algorithm required changes due to the evoked response undersensing that was taking place in the Kappa® family of devices. We're still uncertain if customers will try it after the enhancement was made to the algorithm.

3. **Expensive:** This is the top-tier device and very expensive.

4. **Auto Sensing:** This feature is susceptible to inappropriate pathological sensing resulting in inappropriate therapy to the patient.

5. **Enhanced Search AV+:** An enhancement added to the EnPulse™ device over the Kappa® family of devices which allows the AV delay to extend by 62 ms rather than 31 ms.

Selling Against the Medtronic AT500™ Pacemaker

1. **Poor diagnostics:** The diagnostics of the Medtronic AT500™ pacemaker are extensive, but very difficult to interpret for a physician that is only familiar with bradycardia devices (not using defibrillators). Very difficult to program and not easy to use, the diagnostics have also been shown in clinical studies to be extremely inaccurate. In addition, the stored EGMs cause significant battery drain.

2. **Insignificant prevention pacing algorithms:** The Medtronic AT500™ pacemaker verification study (325 patients, $p < 0.89$) and the ATTEST trial (370 patients, $p < 0.25$) showed no significant difference in AT frequency and burden when comparing the On versus the Off group. The ADOPT-A trial showed AF suppression to be clinically significant in decreasing AF and AT burden (399 patients, $p < 0.05$) 25% and 65% respectively.

3. **Insignificant ATP algorithms:** The Medtronic AT500™ pacemaker verification study (325 patients, $p < 0.89$) and the ATTEST trial (370 patients, $p < 0.25$) showed no significant difference in the mean number of AT episodes or AT burden when comparing ATP in the On versus the Off group. In the ASPECT clinical trial (288 patients), investigators found similar results with no clinical significant.

4. **Poor bradycardia features:** The Medtronic AT500™ pacemaker is a limited bradycardia pacemaker. It does not offer a Capture Management, Rate Drop, or Sleep Rate algorithm. The Victory®, Team ADx® and Identity® pacemaker families are the only devices that offer premier bradycardia features, including the AutoCapture™ pacing system, Advanced Hysteresis, Rest Rate, and the Accelerometer sensor. It also has the only FDA-approved prevention algorithm designed to suppress atrial fibrillation.

"Remember! The Medtronic AT500™ pacemaker will only deliver ATP Therapy if an episode is classified as "AT" by the device. Episodes classified as "AF" will be monitored."

Guidant

Selling Against the Insignia® Ultra Pacemaker

1. **Dual-sensors:** Dual-sensors can be very complicated to set up appropriately and even more difficult to optimize.

2. **Automatic Capture algorithm:** The Insignia® Ultra is the first generation device to enter the market with this feature. Therefore, it lacks the ten years plus of clinical success that our AutoCapture™ pacing system has demonstrated.

3. **Rate Smoothing:** This feature is functional except during the 8 cycles of Search Hysteresis, during ATR fallback (until fall back reaches ATR lower limit or the SIR), upon triggering of the PMT termination algorithm, Sudden Brady Response and when Ventricular Rate Regulation is active in a dual-chamber mode.

4. **Automatic Capture:** This feature only incorporates a fixed pulse width value, whereas the AutoCapture™ pacing system offers flexibility with a programmable pulse width and amplitude.

5. **AV Search Hysteresis:** This feature is limited to 300 ms.

Biotronik

Selling Against the Philos® II Pacemaker

1. The Philos® II device is very heavy and has poor longevity (5.5 years @ 3.6 V).

2. Only five SEGM triggers are available.

3. Even though the device monitors the ventricle on every beat it only does a threshold search at pre-set times to adjust the primary output pulse amplitude.

4. There is no clinical experience since this is the first generation device with the Active Capture Control feature.

5. No atrial arrhythmia prevention algorithm.

ELA

Selling Against the Symphony® Pacemaker

1. **Auto Mode Switch:** ELA automatically suspends atrial tracking from the first premature atrial beat, preventing palpitations resulting from Wenckebach during the detection interval. The Symphony® device mode switches for any sustained atrial arrhythmia > 120 ppm. Yes, it simplifies the programming but clinical studies have shown the lower the mode switch rate the higher the number of recorded inappropriate episodes. This also doesn't allow the physician flexibility to program an atrial tachycardia detection rate that is more tailored to the patient's needs.

2. **Auto Threshold:** The device checks the threshold only four times a day, but delivers the high amplitude back-up when capture isn't confirmed. Patients may be pacing at high output for extended periods of time which may negatively impact the device longevity.

3. **Rest Rate is controlled by the MV sensor:** Patients potentially (depending on how often the algorithm updates) may not be able to achieve the benefits of rest rate if they have a respiratory disease or heart failure.

4. **Dual-sensors:** This feature may be difficult and time-consuming to set up appropriately.

Victory® Device Questions and Answers

"What programmer will interrogate the Victory® pacemaker?" The 3510/3510+ programmer, and in the near future the Merlin Patient Care System, will interrogate the Victory® device.

"What programmer software is required to interrogate the Victory® pacemaker?" The programmer software is 3307, version 5.0 or higher.

"Does the Victory® device have SEGMs?" Yes, there are nine programmable triggers with 120 seconds of storage.

"Do the follow-up EGMs reduce the SEGM capacity?" No, follow-up EGMs are separate and do not affect the capacity of the device to store SEGMs.

"Why don't the AT/AF episode counts match the AMS counts?" With the introduction of the AT/AF Diagnostics we introduced a separate algorithm to populate this diagnostics. The purpose of this algorithm is to clarify true arrhythmias from signal drop out that most devices experience. Prior to exiting an AT/AF episode the device has a short 20 second reconfirmation period to verify the patient has truly returned to sinus rhythm. Only after the device has confirmed sinus rhythm is the AT/AF episode terminated. Therefore your AMS episodes may be higher than your AT/AF episodes. The percent of time between AMS and AT/AF should be very close.

"How do VIP™ technology and Rate Responsive AV/PV interact?" If VIP and RRAV/PV are both programmed On, the below interaction may take place. Keep in mind that VIP™ technology is now active up to 110 ppm and Rate Responsive AV/PV activates at 90 ppm, so in essence you have a 20 ppm overlap. These two algorithms are combined to give you the operating AV delay.

Here is the formula (Programmed AV - Rate Responsive AV) + Ventricular Intrinsic Preference

Programmed AV delay	200 ms
Rate Responsive AV/PV delay	Medium 2 ms/beat over 90 ppm
Ventricular Intrinsic Preference	100 ms delta
Current operating rate	100 bpm

(200-20) + 100 = 280 ms for operating AV delay for that beat

"How and when are follow-up EGMs generated in P/R wave tests?" The device dictated P/R-wave measurements are attempted once every 23 hours. In order to make a daily "measurement," five P/R waves are measured and a minimum, maximum and median are calculated. The five waveforms displayed as follow-up EGMs are the five P/R waves that were measured in order to determine the minimum, maximum, and median for one daily measurement. These measurements are internal to the device and a weekly median is displayed to the user via the trend.

"How many intrinsic events are monitored before one P/R wave is automatically measured out-of-clinic?" There is a 24-cycle monitoring period before the device configures the hardware to begin measuring P/R waves. As long as the monitoring phase is completed without the detection of eight consecutive paced events or four occurrences of the sequence (paced-sensed-paced), the device will begin measuring the intrinsic P/R- wave signals.

"What is the sequence of the AutoCapture™ pacing system follow-up EGMs?" The five follow-up EGMs are the last five pacing pulses from the last AutoCapture threshold test. They usually consist of a test pulse at the amplitude prior to confirming loss of capture, the two pulses that identified loss of capture (voltage one step below the capture threshold) and the two test pulses where the capture threshold is identified. On occasion you will see three losses of capture and two test pulses when capture is regained.

"If there is no intrinsic signal when the measurement timer expires, the device will attempt a measurement one hour later. Is there some time-out on this process?" The P/R-wave measurements occur every 23 hours approximately (with Measured Data Logging and Lead Impedance Monitoring). These measurements have two phases: stability monitoring and amplitude measurement. If the device does not find a stable rhythm, stability monitoring just repeats over and over again (for the remaining portion of the 23 hours, if needed) until a stable rhythm is present. If the algorithm has entered the measurement phase however, and the algorithm becomes inhibited, the device will attempt a measurement one hour later. This behavior may continue for the rest of the day or until a successful measurement has taken place. If a measurement cannot be made before the next 23-hour clock expires, the device records inhibit for that day.

"When would the "I" be displayed on the P/R-wave trend?" If the algorithm is inhibited for an entire week, the inhibited "I" appears on the trend.

"How many complexes are needed to complete a P/R-wave measurement?" The measurement is always a median of five measured complexes. It is possible, but rare, that we'll get fewer than five follow-up EGM complexes. This rare occasion can occur with some AF Suppression™ algorithm interactions.

"Is the "Automatic" on the AutoCapture Weekly Trend the last programmed threshold data or the last loss of capture?" Ventricular AutoCapture automatic threshold measurements can be triggered by a multitude of things: loss of capture, magnet application or a normally scheduled threshold search.

"What voltage and pulse width is the lead impedance monitoring conducted at?" The out-of-clinic lead impedance measurements are conducted at a minimum of 2.5 V, or the programmed pulse amplitude if programmed higher. Device conducted lead impedance measurements have no minimum pulse width limitation.

"Does the programmed pulse width remain when an auto polarity switch occurs?" Yes, an auto polarity switch has no effect on the pulse width value.

"What inhibits a lead impedance measurement?" Both atrial and ventricular lead impedance measurements are inhibited if the rate is faster than 170 ppm. In addition, atrial lead impedance measurement is also inhibited if five PVCs occur.

Device Family Name	Size	DR	SR	DC	VDR	SC	DR M/S	SR M/S
Victory®	Micro (0.55 Ah)	5810	5610					
	XL (0.95 Ah)	5826						
Identity® ADx	Micro (0.55 Ah)	5380	5180		5480			
	XL (0.95 Ah)	5386		5286				
Integrity® ADx	Micro (0.55 Ah)	5360	5160					
	XL (0.95 Ah)	5366						
Verity® ADx	Micro (0.55 Ah)							
	XL (0.95 Ah)	5356	5156	5256	5456/i	5056	5357	5157
Identity®	Micro (0.55 Ah)	5370	5172					
	XL (0.95 Ah)	5376						

Identity® ADx DR vs. Identity® DR vs. Victory® DR Device

Feature or Therapy	Identity® ADx 5386 XL DR 5380 DR	Identity® 5376 XL DR 5370 DR	Victory® 5816 XL DR 5810 DR
AF Prevention Therapy	Clinically proven AF Suppression™ algorithm	Clinically proven AF Suppression™ algorithm	Clinically proven AF Suppression™ algorithm
Beat-by-Beat Ventricular AutoCapture™	✓	✓	✓
Automatic Capture Threshold Search	✓	✓	✓
Auto Mode Switch	✓	✓	✓
AMS Base Rate	✓	✓	✓
Auto Sleep (Rest) Mode	Sensor-controlled	Sensor-controlled	Sensor-controlled
Rate Hysteresis with Programmable Search	✓	✓	✓
Advanced Hysteresis	✓	✓	✓
AutoIntrinsic Conduction Search™	✓	✓	
Ventricular Intrinsic Preference (VIP™)			✓
Negative AV/PV Hysteresis	✓	✓	✓
Programmable Atrial Absolute Refractory			
Period	✓		✓
Rate-Adaptive AV/PV Delay	✓	✓	✓
PMT Intervention	✓	✓	✓
PVC Response	✓	✓	✓
Atrial Protection Interval	✓		✓
Rate-Adaptive Pacing			
Sensor	Accelerometer	Accelerometer	Accelerometer
Rate Responsive PVARP	✓		✓
Far Field Protection	✓		✓
Automatic Rate-Adaptive Pacing	✓	✓	✓
Sensor Passive	✓	✓	✓
Sensor Behavior Prediction	✓	✓	✓
Diagnostics and Follow-up			
AF Suppression™ Histogram	✓	✓	✓
AF Suppression™ Histogram Event Counts	✓	✓	✓
AT/AF Episodes Log/Histogram	✓		✓
Ventricular Capture Threshold Monitoring	Long Term Threshold Record	Long Term Threshold Record	Weekly Threshold Trend
Daily Intrinsic Measurement and Trend			✓
Rate Histogram	✓	✓	✓
Sensor-Indicated Rate Histogram	✓	✓	✓
Daily Lead Measurement and Trend			✓
Mode Switch Histogram	✓	✓	✓
Patient-Triggered Stored EGM	✓	✓	✓
AMS Log AT/AF Episodes Log	32 episodes 16 frozen, 16 FIFO (time/date, duration and max A-rate)	16 episodes AMS (time/date, duration max A-rate) AMS Only	32 episodes 16 frozen, 16 FIFO (time/date, duration and max A-rate)
V. Rate During AMS Histogram			✓

Identity® ADx DR vs. Identity® DR vs. Victory® DR Device

Feature or Therapy	Identity® ADx 5386 XL DR 5380 DR	Identity® 5376 XL DR 5370 DR	Victory® 5816 XL DR 5810 DR
Diagnostics and Follow-up (continued)			
Selectable Stored IEGMs	Up to 12	Up to 12	Up to 12
Stored IEGM Trigger Counter	✓	✓	✓
Ventricular High Rate Episode Log	Counter/IEGM Patient-Magnet High Atrial Rate High Ventricular Rate	Counter/IEGM Patient-Magnet High Atrial Rate High Ventricular Rate	Counter/IEGM Patient-Magnet High Atrial Rate High Ventricular Rate
IEGM Trigger Options	AMS Entry AMS Exit PMT Termination PVCs (2 to 5) Adv. Hysteresis AT/AF Detection	AMS Entry AMS Exit PMT Termination PVCs (2 to 5)	AMS Entry AMS Exit PMT Termination PVCs (2 to 5) Adv. Hysteresis AT/AF Detection
IEGM Storage Time 50% Pre-Detection & 50% Post-Detection	Rolling or Frozen A = 120 sec V = 120 sec A&V = 48 sec Custom = 120 sec	Rolling or Frozen A = 120 sec V = 120 sec A&V = 48 sec Custom = 120 sec	Rolling or Frozen A = 120 sec V = 120 sec A&V = 48 sec Custom = 120 sec
Automatic Follow-Up	✓	✓	✓
Full-Page 8.5" x 11" Printouts	✓	✓	✓
Electronic Calipers	✓	✓	✓
Non-Invasive Programmed Stimulation (NIPS)	✓	✓	✓
PMT Counter	✓	✓	✓
Longevity Estimate	✓	✓	✓
Real-Time Extended Markers	✓	✓	✓
Summary Screen	FastPath® Summary with Alerts	FastPath® Summary with Alerts	FastPath® Summary with Alerts
Previous Test Results	✓	✓	✓
Other			
Weight/Volume	**Identity® ADx XL DR** 23.5 gm / 11 cc **Identity® ADx DR** 18 gm / 8 cc	**Identity® XL DR** 23.5 gm / 11 cc **Identity® DR** 18 gm / 8 cc	**Victory® XL DR** 23.5 gm / 11 cc **Victory® DR** 18 gm / 8 cc
Longevity: 100% pacing @ 60 ppm AC-Off: A&V = 2.5 V, 500 Ω & PW = 0.4 ms AC-On: A = 2.5 V, V = 1 V, 500 Ω & PW = 0.4 ms	**Identity® ADx XL DR** 12.3 years w/ AC 11.0 years w/o **Identity® ADx DR** 6.9 years w/ AC 6.2 years w/o AC	**Identity® XL DR** 12.3 years w/ AC 11.0 years w/o AC **Identity® DR** 6.9 years w/ AC 6.2 years w/o AC	**Victory® XL DR** 12.3 years w/ AC 11.0 years w/o AC **Victory® DR** 6.9 years w/ AC 6.2 years w/o AC

AC = AutoCapture™ Algorithm

Victory® DR vs. Insignia® Ultra DR vs. EnPulse® DR Device

Feature or Therapy	Victory® DR 5816 XL DR 5810 DR	Insignia® Ultra 1291 1290	EnPulse® E2DR01 E2DR21
AF Prevention Therapy	Clinically proven AF Suppression™		PMOP
Beat-by-Beat Ventricular AutoCapture™	✓	Automatic Capture	Not beat-by-beat Capture Management
Atrial Capture Management			✓
Automatic V. Capture Threshold Search	✓	✓	Limited
Auto Mode Switch	✓	✓	✓
AMS Base Rate	✓	Ventricular Rate Regulation	Ventricular Response Pacing
Auto Sensitivity Measurement/Adjustment		✓	✓
Auto Sleep (Rest) Mode	Sensor controlled		Clock controlled
Rate Hysteresis with Programmable Search	✓	✓	Sinus Preference
Advanced Hysteresis	✓	Sudden Brady Response	Rate Drop Response
Ventricular Intrinsic Preference (VIP™)	✓	AV Search	Search AV+
Negative AV/PV Hysteresis	✓		
Programmable Atrial Absolute Refractory Period	✓	✓	✓
Rate-Adaptive AV/PV Delay	✓	Dynamic AV Delay	✓
PMT Intervention	✓	✓	✓
PVC Response	✓	✓	✓
Non-Competitive Atrial Pacing	Atrial Protection Interval	Atrial Flutter Response	✓
Rate-Adaptive Pacing			
Sensor	Accelerometer	MV + Accelerometer	Accelerometer
Rate Responsive PVARP	✓	Dynamic PVARP	Varied & Auto
Far Field Protection	✓		
Automatic Rate-Adaptive Pacing	✓	Auto Lifestyle	✓
Sensor Passive	✓		
Sensor Behavior Prediction	✓	Expert Ease	Exercise test
Diagnostics and Follow-up			
AF Suppression™ Histogram	✓		
AF Suppression™ Histogram Event Counts	✓		
AT/AF Episodes Histogram	✓	Limited	Atrial Arrhythmia Trend
Ventricular Capture Threshold Monitoring	Weekly Threshold Trend	Daily Measurements	Capture Management Trend
Auto P&R Wave In- and Out-of-Clinic	✓	✓	✓
Rate Histogram	✓	✓	✓
Sensor-Indicated Rate Histogram	✓	Activity Log	✓
Lead Monitor & Trends	✓	✓	✓
V. Rate during AMS Histogram	✓	✓	✓
Mode Switch Histogram	✓	✓	✓
Patient-Triggered Stored EGM	✓	✓	Limited
AMS Log AT/AF Episodes Log	32 episodes 16 frozen, 16 FIFO (time/date, duration and max A rate)	40 episodes Inclusive of EGM Storage (Total time, Max Time, Average Time)	16 episodes (time/date, duration, max A rate) Also: max V rate, avg. V rate, sensor rate

Victory® DR vs. Insignia® Ultra DR vs. EnPulse® DR Device

Feature or Therapy	Victory® DR 5816 XL DR 5810 DR	Insignia® Ultra 1291 1290	EnPulse® E2DR01 E2DR21
Diagnostics and Follow-up (continued)			
Stored IEGM Trigger Counter	✓	✓	✓
Ventricular High Rate Episode Log	Counter/IEGM	Counter/IEGM	Counter/IEGM
IEGM Trigger Options	Patient-Magnet High Atrial Rate High Ventricular Rate AMS Entry AMS Exit PMT Termination PVCs (2 to 5) Adv. Hysteresis AT/AF Detection	A. Tachy Detection A. Tachy Response V. Tachy Detection Magnet Non-sustained VT Sudden brady response PMT High Ventricular Rate	High Atrial Rate High Atrial Rate
IEGM Storage Time 50% Pre-Detection & 50% Post-Detection	Rolling or Frozen A = 120 sec V = 120 sec A&V = 48 sec Custom = 120 sec	Rolling only Max 110 seconds Pre/post storage can be selected	Rolling or Frozen A = 48 seconds V = 48 seconds A&V = n/a Summed = 48 sec
Full-Page 8.5" x 11" Printouts	✓		
Electronic Calipers	✓	✓	✓
Non-Invasive Programmed Stimulation (NIPS)	✓	✓	✓
PMT Counter	✓	✓	✓
Longevity Estimate	✓	✓	✓
Real Time Extended Markers	✓	✓	✓
Summary Screen	FastPath® Summary with Alerts	System Summary	Quick Look II with Alerts
Previous Test Results	✓		
Other			
Weight/Volume	**Victory® XL DR** 23.5 gm / 11 cc **Victory® DR** 18 gm / 8 cc	**Insignia® Ultra 1291** 29.6 gm / 12.6 cc **Insignia® Ultra 1290** 25.4 gm / 10.8 cc	**EnPulse® E2DR01** 27.1 gm / 12.1 cc **EnPulse® E2DR21** 23.6 gm / 11.1 cc
Longevity: 100% pacing @ 60 ppm **AC&CM-Off:** A&V = 2.5 V, 500 Ω & PW = 0.4 ms **AC-On:** A = 2.5 V, V = 1 V, 500 Ω & PW = 0.4 ms **CM-On:** A = 2.5 V, V = 1.5 V, 500 Ω & PW = 0.4 ms **AuC-On:** A = 2.5 V, V = 1.0 V, 500 Ω & PW = 0.4 ms	**Victory® XL DR** 12.3 years w/ AC 11.0 years w/o **Victory® DR** 6.9 years w/ AC 6.2 years w/o AC	**Insignia® Ultra 1291** 9.5 years w/ AuC 8.5 years w/o AuC **Insignia® Ultra 1290** 6.7 years w/ AuC 6.0 years w/o AuC	**EnPulse® E2DR01** 7.9 years w/ CM 7.5 years w/o CM **EnPulse® E2DR21** 5.7 years w/ CM 5.5 years w/o CM

AC = AutoCapture™ Algorithm
CM = Capture Management
AuC = Automatic Capture

Victory® DR vs. EnRhythm® DR vs. EnPulse® DR Device

Feature or Therapy	Victory® DR 5816 XL DR 5810 DR	EnRhythm® DR P1501DR	EnPulse® E2DR01 E2DR21
AF Prevention Therapy	Clinically proven AF Suppression™	Atrial Rate Stabilization Atrial Preference Pacing PMOP	PMOP
Beat-by-Beat AutoCapture™ Pacing System Ventricle	✓		Not beat-by-beat Capture Management
Atrial Capture Management			✓
Automatic V. Capture Threshold Search	✓		Limited
Auto Mode Switch	✓	✓	✓
AMS Base Rate	✓		Ventricular Response Pacing
Auto Sensitivity Measurement/Adjustment		✓	✓
Auto Sleep (Rest) Mode	Sensor controlled		Clock controlled
Rate Hysteresis with Programmable Search	✓	✓	Sinus Preference
Advanced Hysteresis	✓		Rate Drop Response
Ventricular Intrinsic Preference (VIP™)	✓	Managed Ventricular Pacing	Search AV+
Negative AV/PV Hysteresis	✓		
Programmable Atrial Absolute Refractory Period	✓	✓	✓
Rate-Adaptive AV/PV Delay	✓	✓	✓
PMT Intervention	✓	✓	✓
PVC Response	✓	✓	✓
Non-Competitive Atrial Pacing	✓	✓	✓
Rate-Adaptive Pacing			
Sensor	Accelerometer	Accelerometer	Accelerometer
Rate Responsive PVARP	✓	Dynamic PVARP	Varied & Auto
Far Field Protection	✓		
Automatic Rate-Adaptive Pacing	✓	Auto Lifestyle	✓
Sensor Passive	✓		
Sensor Behavior Prediction	✓	Expert Ease	Exercise test
Diagnostics and Follow-up			
AF Suppression™ Histogram	✓		
AF Suppression™ Histogram Event Counts	✓		
AT/AF Episodes Histogram	✓	Histogram & Trend	Atrial Arrhythmia Trend
Ventricular Capture Threshold Monitoring	Weekly Threshold Trend		Capture Management Trend
Auto P&R Wave Measurements	Device based/trend	Device based/trend	✓
Rate Histogram	✓	✓	✓
Sensor-Indicated Rate Histogram	✓	✓	✓
Lead Monitor & Trends	✓		✓
V. Rate during AMS Histogram	✓	✓	✓
Mode Switch Histogram	✓		✓
Patient-Triggered Stored EGM	✓		Limited
AMS Log AT/AF Episodes Log	32 episodes 16 frozen, 16 FIFO (time/date, duration and max A-rate)		16 episodes (time/date, duration, max A-rate) Also: max V rate, avg. V rate, sensor rate

Victory® DR vs. Insignia® Ultra DR vs. EnPulse® DR Device

Feature or Therapy	Victory® DR 5816 XL DR 5810 DR	EnRhythm® DR P1501DR	EnPulse® E2DR01 E2DR21
Diagnostics and Follow-up (continued)			
Stored IEGM Trigger Counter	✓	✓	✓
Ventricular High Rate Episode Log	Counter/IEGM	Counter/IEGM	Counter/IEGM
IEGM Trigger Options	Patient-Magnet High Atrial Rate High Ventricular Rate AMS Entry AMS Exit PMT Termination PVCs (2 to 5) Adv. Hysteresis AT/AF Detection	VT Monitor SVT VT-NS Treated AT/AF Monitored AT/AF Fast A&V	High Atrial Rate High Ventricular Rate
IEGM Storage Time 50% Pre-Detection & 50% Post-Detection	Rolling or Frozen A = 120 sec V = 120 sec A&V = 48 sec Custom = 120 sec	10 sec prior to detection Approx 16 min	Rolling or Frozen A = 48 seconds V = 48 seconds A&V = n/a Summed = 48 sec
Full-Page 8.5" x 11" Printouts	✓		
Electronic Calipers	✓	✓	✓
Non-Invasive Programmed Stimulation (NIPS)	✓	✓	✓
PMT Counter	✓	✓	✓
Longevity Estimate	✓	✓	✓
Real Time Extended Markers	✓	✓	✓
Summary Screen	FastPath® Summary with Alerts	Quick Look	Quick Look II with Alerts
Previous Test Results	✓		
Other			
Weight/Volume	**Victory® XL DR** 23.5 gm / 11 cc **Victory® DR** 18 gm / 8 cc	**EnRhythm® P1501DR** 21.0 gm/ 13 cc	**EnPulse® E2DR01** 27.1 gm / 12.1 cc **EnPulse® E2DR21** 23.6 gm / 11.1 cc
Longevity: 100% pacing @ 60 ppm **AC & CM-Off:** A&V = 2.5 V, 500 Ω & PW = 0.4 ms **AC-On:** A = 2.5 V, V = 1 V, 500 Ω & PW = 0.4 ms **CM-On:** A = 2.5 V, V = 1.5 V, 500 Ω & PW = 0.4 ms	**Victory® XL DR** 12.3 years w/ AC 11.0 years w/o **Victory® DR** 6.9 years w/ AC 6.2 years w/o AC	**EnRhythm® P1501DR** 10.5 years SEGMs off	**EnPulse® E2DR01** 7.9 years w/ CM 7.5 years w/o CM **EnPulse® E2DR21** 5.7 years w/ CM 5.5 years w/o CM

AC = AutoCapture™ Algorithm
CM = Capture Management

Victory® DR vs. Philos® II DR vs. Symphony® DR Device

Feature or Therapy	Victory® DR 5816 XL DR 5810 DR	Philos® II DR 341 826	Symphony® DR 2550
AF Prevention Therapy	Clinically proven AF Suppression™		
Beat-by-Beat AutoCapture™ Pacing System Ventricle	✓	Active Capture Control-limited	Auto Threshold
Rate Smoothing		✓	
Automatic V. Capture Threshold Search	✓	✓	✓
Auto Mode Switch	✓	✓	✓
AMS Base Rate	✓		
Auto Sensitivity Measurement/Adjustment			✓
Auto Sleep (Rest) Mode	Sensor controlled	Clock Controlled	MV Sensor controlled
Rate Hysteresis with Programmable Search	✓	✓	
Advanced Hysteresis	✓	✓	DDD/AMC Mode w/ acceleration
Ventricular Intrinsic Preference (VIP™)	✓	AV Hysteresis	DDD/AMC Mode
Negative AV/PV Hysteresis	✓	✓	
Programmable Atrial Absolute Refractory			
Period	✓	✓	Auto
Rate-Adaptive AV/PV Delay PMT Intervention	✓ ✓	✓ ✓	Auto
PVC Response	✓	✓	
Non-Competitive Atrial Pacing	✓		
Rate-Adaptive Pacing			
Sensor	Accelerometer	Accelerometer	MV + Accelerometer
Rate Responsive PVARP	✓	✓	Auto
Far Field Protection	✓	✓	
Automatic Rate-Adaptive Pacing	✓	✓	✓
Sensor Passive	✓		
Sensor Behavior Prediction	✓		Clinical programming
Diagnostics and Follow-up			
AF Suppression™ Histogram	✓		
AF Suppression™ Histogram Event Counts	✓		
AT/AF Episodes Histogram	✓	✓	
Ventricular Capture Threshold Monitoring	Weekly Threshold Trend	ACC Threshold Trends	V Threshold
Auto P&R Wave Measurements	Device based/Trend	Device based/Trend	Device based/Trend
Rate Histogram	✓	✓	✓
Sensor-Indicated Rate Histogram	✓	✓	✓
Lead Monitor & Trends	✓	✓	
V. Rate during AMS Histogram	✓	✓	✓
Mode Switch Histogram	✓	✓	✓
Patient-Triggered Stored EGM	✓	✓	
AMS Log AT/AF Episodes Log	32 episodes 16 frozen, 16 FIFO (time/date, duration and max A-rate) max V rate, avg. V rate,	64 episodes all being FIFO Atrial Extrasystoles Statistics (AES) A Fib/ A Flutter/Tach Zone changes V Rate vs. A Rate	Date of 1st atrial arrhythmia, # of AMS episodes and total time in AMS

Victory® DR vs. Philos® II DR vs. Symphony™ DR Device

Feature or Therapy	Victory® DR 5816 XL DR 5810 DR	Philos® II DR 341 826	Symphony® DR 2550
Diagnostics and Follow-up (continued)			
Stored IEGM Trigger Counter	✓		
Ventricular High Rate Episode Log	Counter/IEGM	✓	✓
IEGM Trigger Options	Patient-Magnet High Atrial Rate High Ventricular Rate AMS Entry AMS Exit PMT Termination PVCs (2 to 5) Adv. Hysteresis AT/AF Detection	Patient-Magnet High A-Rate High V-Rate AMS Entry PMT Termination	Atrial Bursts Mode Switch Episodes Ventricular Bursts
IEGM Storage Time 50% Pre-Detection & 50% Post-Detection	Rolling or Frozen A = 120 sec V = 120 sec A&V = 48 sec Custom = 120 sec	Dual IEGM available 120 seconds 12 EGMs @10 sec each	Up to 24 episodes 12 sec pre-trigger and 4 sec post trigger with 245 events 6.4 min EGM
Full-Page 8.5" x 11" Printouts	✓		
Electronic Calipers	✓		
Non-Invasive Programmed Stimulation (NIPS)	✓	✓	✓
PMT Counter	✓		
Longevity Estimate	✓		✓
Real Time Extended Markers	✓		
Summary Screen	FastPath® Summary with Alerts		Up to 24 Alerts
Previous Test Results	✓		
Other			
Weight/Volume	**Victory® XL DR** 23.5 gm / 11 cc **Victory® DR** 18 gm / 8 cc	**Philos® II DR** 26.0 gm /10.0 cc	**Symphony® DR** 24 gm / 10.4 cc
Longevity: 100% pacing @ 60 ppm **AC-Off:** A&V = 2.5 V, 500 Ω & PW = 0.4 ms **AC-On:** A = 2.5 V, V = 1 V, 500 Ω & PW = 0.4 ms	**Victory® XL DR** 12.3 years w/ AC 11.0 years w/o **Victory® DR** 6.9 years w/ AC 6.2 years w/o AC	**Philos® II DR** 5.5 years (3.6 V)	**Symphony® DR** 11.5 years (0.35 ms)

AC = AutoCapture™ Algorithm

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